

Dr Francis Tomlinson

MBBS, MD, PhD, FRACS

Dr Terry Coyne

MBBS, FRACS

Dr Richard Kahler

MBBS, FRACS

Dr David Walker

BMedSc, MBBS, PhD, FRACS

Dr Michael Bryant

MBBS, FRACS

All correspondence to:

BrizBrain & Spine

Evan Thomson Building
Level 10, Chasely Street
Auchenflower QLD 4066

T - 07 3833 2500

F - 07 3833 2511

www.brizbrain.com.au

Grey Matters newsletter

MARCH 2010

www.brizbrain.com.au

UPDATE

Welcome to the first edition of Grey Matters for 2010. This year is set to be very busy for BrizBrain & Spine and we are looking forward to working closely with our referrers and suppliers to provide outstanding patient care.

Our new physiotherapy and rehabilitation service, Fortus Health, has opened at fantastic new facilities at Chermside.

Fortus Health is receiving rave reviews from their first patients, who can have greater confidence in their programmes knowing that they have highly specialised physiotherapists treating them, with programmes developed in

conjunction with BrizBrain & Spine.

We are enthusiastic about the launch of this highly unique physiotherapy service, as it not only ensures quality physiotherapy treatment, but it also allows BrizBrain & Spine to provide first-class rehabilitation to our patients. To learn more please call 3833 2555 or visit www.fortushealth.com.au.

Another exciting development that will take place in the next few months is the opening of our new clinical suites, located at St Andrew's Hospital.

Construction on this project is currently underway and we look forward to utilising our new premises in the coming months.

SUPRASellar MENINGIOMA



A 35-year old woman recently presented for review with failing vision.

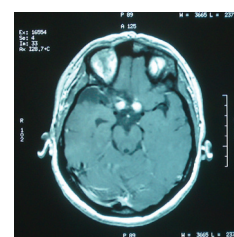
She had a history of a large suprasellar meningioma five years before, which was diagnosed during her first pregnancy with visual loss. At the time, a complete macroscopic excision was performed via a right fronto-temporal craniotomy.

At the recent presentation, the preoperative MRI scan showed two distinct areas of recurrence, under each optic nerve. There was also evidence of

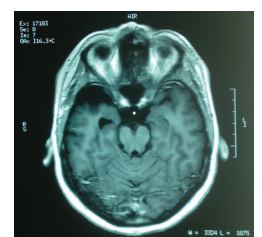
significant retraction injury on the right frontal and temporal lobes from the previous surgery.

A stereotactic craniotomy via a left eyebrow incision and supraorbital minicraniotomy was performed. This resulted in complete excision of the tumours, recovery of visual problems and no retraction injury to the brain.

This case illustrates the usefulness of minimally invasive neurosurgery techniques applied to a common problem, which can sometimes be fraught with significant risk.



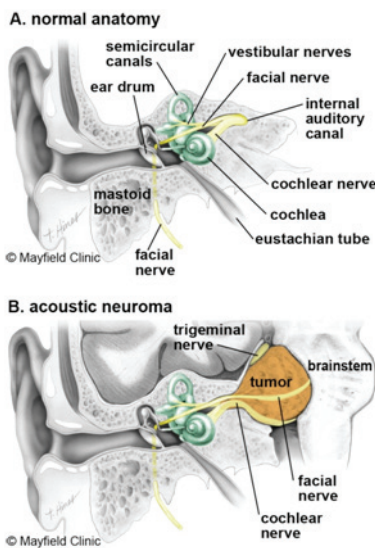
Pre-Op



Post-Op

ACOUSTIC NEUROMA

An acoustic neuroma (also known as a vestibular schwannoma) is a benign tumour that originates from the eighth cranial nerve. This nerve passes from the brainstem to the inner ear and is involved in the transmission of sound and balance from the inner ear to the brain. The eighth nerve is closely associated with the seventh nerve, as they run together in the internal auditory canal to the inner ear. The seventh nerve is responsible for the motor supply of muscles for facial expression. Therefore if the nerve is damaged, the facial muscles weaken.



Acoustic neuromas are a slow growing tumour and they generally arise from the vestibular nerves. As they grow in size they can affect the balance and hearing nerves, resulting in symptoms such as deafness, loss of balance and tinnitus. If the tumour gets very large it can cause numbness of the face and facial weakness, or compression of the brainstem, causing stroke-like symptoms of arm and leg weakness.

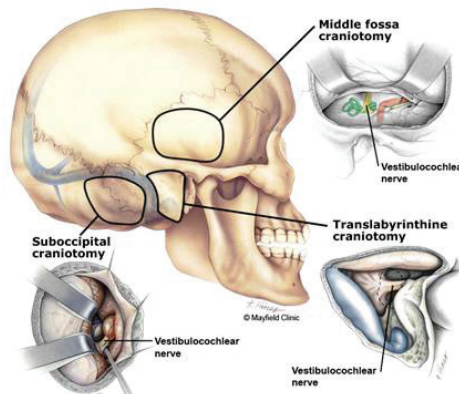
Tumours are typically described as small (less than 1.5cm), medium (1.5 to 2.5cm) or large (more than 2.5cm).

There are three treatment options available to patients; observation, surgery and radiation therapy or "radiosurgery".

Choosing the best therapy is a decision

made by both the patient and the surgeon after consideration of the patient's age, symptoms, health, tumour size and hearing ability.

Surgical treatment options for the removal of an acoustic neuroma include the translabyrinthine approach, the retrosigmoid/sub-occipital approach and the middle fossa approach. The choice of approach is based on factors such as tumour size, location, surgeon preference and whether hearing preservation is a goal.



The main objective of the surgery is tumour removal without causing neurological damage or other complications. However, facial nerve preservation is also an important objective. The larger the tumour, the more difficult it is to preserve the nerve. This nerve is closely applied to the tumour and if damaged, facial weakness results. This can be permanent and causes a significant cosmetic effect with facial drooping. Severe facial weakness can impair eye closure, resulting in corneal dryness, ulceration and even blindness if not managed. It is therefore very important to preserve the facial nerve.

At BrizBrain and Spine we have obtained an independent assessment of our surgical outcomes following acoustic neuroma removal. This data is available for viewing at www.brizbrain.com.au/library-index.html.

* Illustrations from www.anausa.org

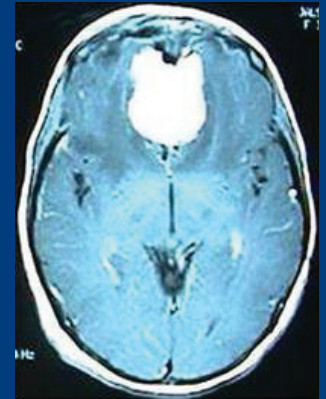
DID YOU KNOW?

The human brain is usually said to work at about 15% capacity¹

You use up to 7 million brain cells a day¹

¹ Juan, Dr Stephen. (2000). *The Odd Body and Brain*. Sydney: Harper Collins Publishers.

GREY MATTERS QUIZ



What is the pathology demonstrated on this contrast enhanced, T1 weighted MRI scan?

- A. Pituitary macroadenoma
- B. Giant aneurysm on the basilar tip
- C. Clival meningioma
- D. Olfactory groove meningioma
- E. Foreign body

Please email the correct answer to katem@brizbrain.com.au by close of business 5 April 2010. All correct entries will go into a draw to win a \$50 Coles Myer voucher. The winner will be notified by 6 April 2010.

NEWSLETTER SUBSCRIPTION

To ensure that you always receive your quarterly copy of Grey Matter/Hope Matters, please visit www.brizbrain.com.au and follow the prompts to subscribe.

Hospitals:

The Wesley Hospital, Auchenflower
St Andrew's Hospital, Spring Hill
Holy Spirit Northside Hospital, Chermside

Regional Clinics:

St Vincent's Medical Centre, Toowoomba
Sunshine Coast Private Hospital, Buderim
Tweed Day Surgery, Tweed Heads
Mater Private Hospital, Rockhampton



KILLER T-CELL THERAPY FOR GLIOBLASTOMA TRIAL

The BrizBrain & Spine Research Foundation has recently begun our latest clinical trial, Killer T-cell Therapy for Glioblastoma.

Sponsored by the Queensland Institute of Medical Research (QIMR), this clinical trial is seeking to provide a treatment for recurrent malignant glioma patients and increase their short life expectancy.

The standard initial treatment for Glioblastoma patients is surgery, radiation and chemotherapy; however there is currently no effective treatment if the cancer grows back. The Killer T-cell Therapy for Glioblastoma Trial is attempting to change this by

creating a method of treating the recurrent tumour and therefore giving these patients a second chance.

Recent studies suggest that most or all gliomas carry a very common virus, called human cytomegalovirus (HCMV), which is normally controlled very well by white blood cells, known as killer T-cells.

The BBSRF trial involves growing a patient's white blood cells against the virus in a laboratory to create killer T-cells. These cells are then injected back into the patient's blood in order to kill the HCMV-infected cells in the glioma, with the expectation that they will reduce the tumour and virus load in the blood.

This study will be running for approximately three and a half years at the Wesley Hospital, with each patient receiving up to four injections of killer T-cells.



Our first Killer T-cell trial patient, Kevin Trickey (pictured left) has already had two doses of the treatment at the Wesley Hospital and was recently profiled in an article about the trial in the Courier Mail.

Mr. Trickey was diagnosed two years ago with a malignant Glioblastoma and has since had two surgeries,

radiotherapy and chemotherapy.

He has kindly offered to be a part of our clinical trial, and is currently undergoing this pioneering treatment in the hope of finding a cure.



SPONSORS

BrizBrain & Spine Research Foundation would like to acknowledge our sponsors; Orphan Australia, Medtronic and Schering-Plough. Their contribution enables us to continue our research and improve the treatment and post-operative care of patients, so they can return to a normal life as quickly as possible.

UPCOMING EVENTS

We are actively fundraising to attain vital funds for the Research Foundation.

Stay tuned for some exciting events in 2010, including the Brain Tumour Awareness Walk, Orange Thumbs and more!

DONATE TO THE RESEARCH FOUNDATION

As a not-for-profit charity, the BrizBrain & Spine Research Foundation relies entirely on the generosity of donations.

If you would like to make a contribution to our charity, you can do so by calling Kate McBain on 3833 2500 or visiting our website (www.bbsresearch.com.au) and following the prompts to donate.



VIV'S QUARTERLY COLUMN

The Research Foundation is off to a flying start this year with the enrolment of our first patient into the Killer T-cell Therapy for Glioblastoma Trial, and we hope to enrol more patients in the upcoming months.

On recurrence of a malignant primary brain tumour we struggle to offer effective treatments in gaining control of this cancer. This trial is important because it offers patients another option and hope in fighting this aggressive disease.

The BrizBrain & Spine Research Foundation also welcomes the appointment of a new Research Nurse, Alice McClymont, who will coordinate a multicenter study known as the 'Intradiscal' clinical trial.

Alice has extensive experience in research coordination and will be a valuable asset to the foundation. The BrizBrain & Spine Research Foundation's involvement in this trial demonstrates our commitment to research in all areas of the nervous system.

FUNDRAISING UPDATE

On 29 November 2009, the inaugural Kevin Jackson Memorial Golf Day (pictured) was held to commemorate the life of Kevin Jackson, who sadly passed away last year.

His family arranged a fundraiser at Sandy Gallop Golf Course, Ipswich, for all of the community to get together and be able to remember Kevin, as well as raise funds for further research.

The day raised an impressive \$2,707 for the BrizBrain & Spine Research Foundation and we would like to thank everyone involved on the day for their fantastic efforts to raise such an amazing amount.



2009 was a very successful fundraising year for the BrizBrain & Spine Research Foundation.

All funds raised go towards supporting our current trials and developing further research to continue to advance the treatment of brain and spinal conditions to achieve better outcomes for our patients.

Due to the success of the 2009 Orange Thumbs and the Brain Tumour Awareness Walk events, we will be repeating these fundraisers in the latter part of 2010.

The BrizBrain & Spine Research Foundation will also be hosting some other exciting events throughout the year to raise necessary funds.

As a not-for-profit organisation, the BrizBrain & Spine Research Foundation relies entirely on donations and the assistance of volunteers and fundraisers in the community to continue our research.

We would not be able to operate without their generosity and we would like to thank everyone who aided our fundraising over the past year.